AMENDMENTS TO THE CLAIMS

Claims 1-15 (Cancelled)

16. (Original) An anti-fuse formed on a first semiconductor material of a first conductivity type, the anti-fuse comprising:

a well formed in the first semiconductor material, the well having a surface, a second conductivity type, and a dopant concentration;

a first doped region of the second conductivity type formed in the well, the first doped region having a dopant concentration that is greater than the dopant concentration of the well;

A1 a second doped region of the first conductivity type formed in the well, the second doped region being spaced apart from the first doped region;

a third doped region formed in the well, the third doped region being spaced apart from the first and second doped regions;

a layer of insulation material formed on the surface of the well, the layer of insulation material having a first opening that exposes the first doped region of the well, a second opening that exposes the second doped region of the well, and a third opening that exposes the third doped region of the well;

a first section of a second semiconductor material formed on the layer of insulation material and the first region;

a second section of the second semiconductor material formed on the layer of insulation material and the second region, the second section being spaced apart from the first section; and

a first layer of dielectric material formed on the first section, the second section, and the third doped region.

17. (Original) The anti-fuse of claim 16 wherein the first section includes:

a first polysilicon region; and

a first layer of silicide formed on the first polysilicon region.

18. (Original) The anti-fuse of claim 17 wherein the second section includes:

a second polysilicon region; and

a second layer of silicide formed on the second polysilicon region.

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19. (Original) The anti-fuse of claim 18 and further comprising a third layer of silicide formed on the third doped region.

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20. (Original) The anti-fuse of claim 19 and further comprising a side wall spacer formed to adjoin the first section over the third doped region.

21. (New) An anti-fuse formed on a semiconductor material of a first conductivity type, the anti-fuse comprising:

a well formed in the semiconductor material, the well having a surface, a second conductivity type, and a dopant concentration;

a first doped region of the second conductivity type formed in the well, the first doped region having a dopant concentration that is greater than the dopant concentration of the well; and

a second doped region of the first conductivity type formed in the well, the second doped region being spaced apart from the first doped region.

22. (New) The anti-fuse of claim 21 and further comprising:

a third doped region formed in the well between the first and second doped regions;

a metallic layer formed on the third doped region; and

a layer of insulation material formed on the metallic layer, the layer of insulation material being free of a conductive material that extends through the layer of insulation material and contacts the metallic layer.

23. (New) The anti-fuse of claim 22 wherein the third doped region has the second conductivity type and a dopant concentration greater than the dopant concentration of the well.

24. (New) The anti-fuse of claim 21 and further comprising a third doped region formed in the well between the first and second doped regions, the third doped region having the second conductivity type and a dopant concentration greater than the dopant concentration of the well.

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25. (New) The anti-fuse of claim 21 and further comprising:

a first region of conductive material formed on the first region, the first region having sidewalls;

a second region of conductive material formed on the second region, the second region having sidewalls and being spaced apart from the first region; and

a layer of insulation material formed between the first and second regions, the layer of insulation material being free of a conductive material that lies between the first and second regions and is spaced apart from the surface of the well.

26. (New) The anti-fuse of claim 25 and further comprising a first sidewall spacer formed to contact the sidewalls of the first region.

27. (New) The anti-fuse of claim 26 and further comprising a second sidewall spacer formed to contact the sidewalls of the second region.

28. (New) The anti-fuse of claim 25 and further comprising:

a third doped region formed in the well between the first and second doped regions; and

a metallic layer formed on the third doped region,

wherein the layer of insulation material is formed on the metallic layer.

29. (New) The anti-fuse of claim 28 wherein the third doped region has the second conductivity type and a dopant concentration greater than the dopant concentration of the well.

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30. (New) The anti-fuse of claim 25 and further comprising a third doped region formed in the well between the first and second doped regions, the third doped region having the second conductivity type and a dopant concentration greater than the dopant concentration of the well.